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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Shin Muto

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EXAMINER

HUSSAIN, IMAD

ART UNIT

PAPER NUMBER

2151

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,246	Applicant(s) MUTO, SHIN	
	Examiner IMAD HUSSAIN	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,8,9,12,13 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-5,8,9,12,13 and 16-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>14 November 2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 28 January 2008 has been received and made of record.
2. This communication is in response to Applicant's reply filed under 3 CFR 1.111 on 28 January 2008 wherein claim(s) 1, 4-5, 8-9, 12-13 and 16-21 were amended and claims 2-3, 6-7, 10-11 and 14-15 were canceled.
3. Amendments to the specification in response to objections have been considered. The amendments to the specification obviate previously raised objections, and as such these objections are hereby withdrawn.
4. Amendments to the claims in response to objections have been considered. The amendments to the claims obviate previously raised objections, and as such these objections are hereby withdrawn.
5. Amendments to the claims in response to 112 rejections have been considered. The cancellation and amendment of claims obviates previously raised objections for claims 1, 3, 7, 11 and 21, and as such these rejections are hereby withdrawn.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 5, 9, 13, 17, 18, 19, 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 5, 9, 13, 17, 18, 19, 20 and 21 recite the limitation “the multicast address for a peripheral discovery request in a sleep status can be different from a multicast address of a peripheral device discovery request in a normal status.” This clause may be interpreted as referring to the multicast address being different between the two statuses or the multicast address being the same between the two statuses.

Claim 21 recites the limitation “power is not supplied to a status management unit... from which a LAN controller can receive a status.” This clause may be interpreted as referring to a to a LAN controller receiving a status or a LAN controller not receiving a status.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 4, 9, 12, 17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kevin A. Cone (US 5915119, hereafter Cone) in view of Takashi Okazawa (US 6459496, hereafter Okazawa) and in further view of Oppenheimer et al (US 5282270, hereafter Oppenheimer).

Regarding claim 1, Cone teaches a peripheral device which can communicate with a plurality of client devices connected to a network, comprising:

reception means ["network adapter", Cone, Figure 2 (218)] *for receiving a sleep* ["suspend"] *release request* ["magic packet"] *from the proxy response server* ["proxy terminal"] *based on a network packet indicating a peripheral device discovery request* ["management request packet"] *for a peripheral device which is changing to a predetermined sleep mode issued by any client device* ["network management station"] *connected to the network after the proxy response server receives the sleep mode transition request from the peripheral device* (Cone, column 4, line 61-column 5, line 30); *and*

control means ["network adapter", Cone, Figure 2 (218)] *for releasing the sleep mode and returning to a data processing wait status when said reception means receives the sleep release request* ["out of suspend in response to the magic packet", Cone, column 5, lines 33-36]

wherein the address for a peripheral device discovery request in a sleep status is the same as (Cone: Column 4 Lines 6-10) *or is different from an address of a peripheral*

device discovery request in a normal status (Cone: Column 1 Lines 39-62 and Column 8 Lines 45-51).

Cone does not explicitly disclose *notification means for notifying a proxy response server connectable to the network of a sleep mode transition request when the peripheral device changes from a normal data processing wait status to a sleep mode.*

However, Okazawa teaches that the peripheral device has a notification means ["IOP", Okazawa, Figure 1 (111)] for informing the proxy response server of the peripheral device's status (Okazawa, column 5, lines 16-23).

Cone and Okazawa are analogous subject matter in the same field of endeavor as both cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-savings effect (Okazawa, column 1, lines 40-47). Therefore, the claimed invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Cone and Okazawa does not explicitly disclose:

the network packet which is the peripheral device discovery request is a search request packet for a multicast address set as a predetermined network address for a plurality of peripheral devices;

However, Oppenheimer teaches that the network packet which is the peripheral device discovery request is a search request packet for a multicast address set as a

predetermined network address for a plurality of peripheral devices (Oppenheimer: Column 2 Lines 6-27, Column 3 Lines 54-56 and Figure 16).

Cone, Okazawa and Oppenheimer are analogous subject matter in the same field of endeavor as all three cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-savings effect (Okazawa, column 1, lines 40-47) and further with the environment-determined multicast addressing taught by Oppenheimer because doing so would allow for communication with a plurality of devices (Oppenheimer, column 1, lines 15-18). Therefore, the claimed invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 4, Cone and Oppenheimer teach *that the search request packet* ["management request packet"] *includes an instruction* (Oppenheimer: Column 2 Lines 6-27, Column 3 Lines 54-56 and Figure 16) *indicating a discovery request to a sleeping device* ["a particular user terminal from suspend mode"] (Cone, column 5, lines 7-10).

Regarding claim 9, Cone, Okazawa and Oppenheimer teach *a client device which can communicate with a plurality of peripheral devices or server devices connected over a network, comprising:*

issue means ["network adapter", Cone, Figure 2 (218)] *for issuing a network packet indicating a specific peripheral device discovery request for discovery of a peripheral device during transition to sleep status based on a response result from a network for a request to retrieve a peripheral device in a normal status* (Cone, column 4, lines 61-64), *wherein the network packet which is the peripheral device discovery request is a search request packet for a multicast address set as a predetermined network address for a plurality of peripheral devices* (Oppenheimer: Column 2 Lines 6-27, Column 3 Lines 54-56 and Figure 16);

reception means ["network adapter", Cone, Figure 2 (218)] *for receiving a return response from any peripheral device notified of a sleep release request by said server device after the peripheral device discovery request has issued by said issue means* (Cone, column 5, lines 31-32)

and data processing means ["interface section", Okazawa, column 2, lines 19-21] *for transmitting a predetermined data processing request to a specific peripheral device whose sleep mode has been released after said reception means has received the return response* (Okazawa, column 11, lines 34-39),

wherein the multicast address for a peripheral device discovery request in a sleep status is the same as a multicast address of a peripheral device discovery request in a normal status (Cone: Column 1 Lines 39-62 and Column 8 Lines 45-51, and Column 4 Lines 6-10).

Regarding claim 12, the claim comprises the same limitations as claims 9 and 4. The same rationale for rejection is applicable.

Regarding claim 17, the claim comprises the same limitations as claim 1. The same rationale for rejection is applicable.

Regarding claim 19, the claim comprises the same limitations as claim 9. The same rationale for rejection is applicable.

Regarding claim 21, Okazawa teaches that *the sleep mode is a mode to which power is not supplied to a status management unit of a printer controller from which a LAN controller can receive a status* (Okazawa, column 2, lines 39-45).

10. Claims 5, 8, 13, 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cone in view of Okazawa and Oppenheimer and in further view of Levine et al (US 6020973, hereafter Levine).

Regarding claim 5, Cone teaches *a server device proxy for a peripheral device which can communicate with a plurality of client devices connected to a network, comprising:*
notification means [Cone, Figure 2 (218), network adapter] for notifying a sleeping peripheral device whose sleep release request has been registered for release

of a sleep mode to a peripheral device retrieved by said discovery means (Cone, column 5, lines 28-30)

wherein the address for a peripheral device discovery request in a sleep status is the same as (Cone: Column 4 Lines 6-10) or is different from an address of a peripheral device discovery request in a normal status (Cone: Column 1 Lines 39-62 and Column 8 Lines 45-51).

Cone does not explicitly disclose:

registration means for receiving a sleep transition request announced from a peripheral device in the network when the peripheral device changes from a normal data processing wait status to a sleep mode

However, Okazawa teaches a host apparatus for a plurality of printers with reception means ["interface section", Okazawa, column 2, lines 19-21] for a sleep transition request announced from a peripheral device in the network (Okazawa, Column 2 Lines 27-31).

Cone and Okazawa are analogous subject matter in the same field of endeavor as both cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-savings effect (Okazawa, column 1, lines 40-47).

Cone and Okazawa do not explicitly disclose:

registration means registering a sleep transition request announced from a peripheral device; and

discovery means for retrieving a peripheral device in a sleep status depending on a network packet indicating a specific peripheral device discovery request for discovery of a sleeping peripheral device issued from any client device connected to the network after registration by said registration means

Levine teaches a method for registering peripheral status in a proxy server database (Levine, column 10, lines 38-42) and retrieving that information from the database in response to a client request (Levine, column 18, lines 3-11).

Cone, Okazawa and Levine are analogous subject matter in the same field of endeavor as all three cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-savings effect (Okazawa, column 1, lines 40-47) and further with the caching database taught by Levine because doing so would minimize the amount of time required to obtain information requested by clients (Levine, column 18, lines 3-11). Therefore, the claimed invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Cone, Okazawa and Levine do not explicitly disclose:

the network packet which is the peripheral device discovery request is a search request packet for a multicast address set as a predetermined network address for a plurality of peripheral devices.

However, Oppenheimer teaches that the network packet which is the peripheral device discovery request is a search request packet for a multicast address set as a predetermined network address for a plurality of peripheral devices (Oppenheimer: Column 2 Lines 6-27, Column 3 Lines 54-56 and Figure 16).

Cone, Okazawa, Levine and Oppenheimer are analogous subject matter in the same field of endeavor as all four cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-savings effect (Okazawa, column 1, lines 40-47) and with the caching database taught by Levine because doing so would minimize the amount of time required to obtain information requested by clients (Levine, column 18, lines 3-11) and further with the environment-determined multicast addressing taught by Oppenheimer because doing so would allow for communication with a plurality of devices (Oppenheimer, column 1, lines 15-18). Therefore, the claimed invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 8, the claim comprises the same limitations as claims 4 and 5. The same rationale for rejection is applicable.

Regarding claim 13, the claim comprises the same limitations as claims 1, 5 and 9. The same rationale for rejection is applicable.

Regarding claim 16, the claim comprises the same limitations as claims 4 and 13. The same rationale for rejection is applicable.

Regarding claim 18, the claim comprises the same limitations as claim 5. The same rationale for rejection is applicable.

Regarding claim 20, the claim comprises the same limitations as claim 13. The same rationale for rejection is applicable.

Response to Arguments

11. Applicant's arguments filed 24 September 2003 have been fully considered, but not found persuasive.

Applicant argues that the combination of Oppenheimer with Cone and Okazawa is improper as Oppenheimer relates to "a method and apparatus for determining the location of an entity an [sic] alias (or entity name) in a communication system" whereas Cone and Okazawa relate to "a proxy terminal in which a number of user terminals that

can be set in a suspend mode are connected to each of several segments making up a network system” and “a system in which a status signal can be provided by an informing means in an interface section to a host unit, by means of which the host unit knows the current status of the printer to which the interface unit belongs,” respectively.

Applicant additionally argues that claim 1 and other independent claims recite the limitation of “the multicast address for a peripheral device discovery request in a sleep status being different from a multicast address of a peripheral device discovery request in a normal status”.

12. In response to applicant's argument that Oppenheimer is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Cone, Okazawa and Oppenheimer are analogous subject matter in the same field of endeavor as all three cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-savings effect (Okazawa, column 1, lines 40-47) and further with the environment-determined multicast addressing taught by Oppenheimer because doing

so would allow for communication with a plurality of devices (Oppenheimer, column 1, lines 15-18). Therefore, the claimed invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

13. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the multicast address being different between statuses) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims as written state that the multicast address "can be different", i.e., the multicast addresses are different or the multicast addresses are not different. Applicant's attention is further directed to the 112 rejections of said claims above and corresponding claims in the prior office action.

Moreover, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As stated in the applicant's arguments, "Applicant submits that the result of that combination would still accommodate the multicast address for a peripheral device discovery request in a sleep status being different from a multicast address of a peripheral device discovery request in a normal status" [Page 17, emphasis examiner's]. Examiner agrees with the assessment that there is no reason that the combination of Oppenheimer with Cone and

Okazawa would not be capable of using any (predetermined) multicast address, regardless of any status associated with said multicast address, and thus the combination.

Furthermore, Cone does teach a change in network address between normal and sleep statuses, in that a unit in sleep status may have its address revoked by a central router such that it is only accessible via the address of its proxy [Cone: Column 8 Lines 45-51, and Column 4 Lines 6-13].

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Reply to a final rejection or action must include cancellation of, or appeal from the rejection of, each rejected claim. If any claim stands allowed, the reply to a final rejection or action must comply with any requirements or objections as to form (see 1.113). If prosecution in an application is closed, an applicant may request continued examination of the application by filing a submission and the fee set forth in § 1.17(e) prior to the earliest of: (c) A submission as used in this section includes, but is not limited to, an information disclosure statement, an amendment to the written description, claims, or drawings, *new arguments*, or *new evidence in support of patentability*. If reply to an Office action under 35 USC 132 is outstanding, the submission must meet the reply requirements of § 1.111 (see MPEP 706.07)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMAD HUSSAIN whose telephone number is (571) 270-3628. The examiner can normally be reached on Monday through Friday from 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IH/
Imad Hussain
Examiner

/Salad Abdullahi/
Primary Examiner, Art Unit 2157